WHAT IS CLAIMED IS:

1. An in-plane switching mode liquid crystal display device comprising:

first and second substrates;

a plurality of gate and data bus lines defining pixel regions and arranged on the first substrate;

a common line in the pixel regions;

a pair of first and second electrodes parallel to each other applying plane electric fields in the pixel regions; and

a liquid crystal layer between the first and second substrates;

wherein $d\Delta n$ is in the range of 0.29-0.36um, where d is the thickness of the liquid crystal layer, and Δn is the refractive anisotropy of the liquid crystal molecule.

2. The in-plane switching mode liquid crystal display device according to claim 1, wherein the first electrode includes data electrode and the second electrode includes common electrode.

3. The in-plane switching mode liquid crystal display device according to claim 1, further comprising:

a plurality of thin film transistors adjacent respective cross points of the gate and data bus lines, each of the thin film transistors including a gate electrode, a gate

insulator, a semiconductor layer, and source and drain electrodes;

a passivation layer on the thin film transistors; and

a first alignment layer on the passivation layer.

4. The in-plane switching mode liquid crystal display device according to claim 3, wherein the passivation layer includes one of SiNx and SiOx.

5. The in-plane switching mode liquid crystal display device according to claim 3, wherein the first alignment layer comprises one of polyamide, polyimide, SiO_2, polyvinylalcohol and polyamic acid.

6. The in-plane switching mode liquid crystal display device according to claim 3, wherein the first alignment layer comprises photosensitive materials.

7. The in-plane switching mode liquid crystal display device according to claim 6, wherein the photosensitive material is selected from the group consisting of polyvinylcinnamate, polysiloxanecinnamate and cellulosecinnamate.

8. The in-plane switching mode liquid crystal display device according to claim 3, further comprising:

a black matrix for preventing light from leaking around the TFTs, gate bus line, and data bus line;

a color filter layer on the second substrate; and

a second alignment layer on the color filter layer.

9. The in-plane switching mode liquid crystal display device according to claim 8, wherein the second alignment layer comprises one of polyamide, polyimide, SiO_2, polyvinylalcohol and polyamic acid.

10. The in-plane switching mode liquid crystal display device according to claim 8, wherein the second alignment layer comprises a photosensitive material.

11. The in-plane switching mode liquid crystal display device according to claim 10, wherein the photosensitive material is selected from the group consisting of polyvinylcinnamate, polysiloxanecinnamate and cellulosecinnamate.

12. A method of making an in-plane switching mode liquid crystal display device having first and second substrates, the method comprising the steps of:

forming a plurality of gate and data bus lines defining pixel regions and arranged on the first substrate;

forming a common line in the pixel regions;

forming a pair of first and second electrodes parallel to each other applying plane electric fields in the pixel regions; and

forming a liquid crystal layer between the first and second substrates;

wherein $d\Delta n$ is in the range of 0.29-0.36um, where d is the thickness of the liquid crystal layer, and Δn is the refractive anisotropy of the liquid crystal molecule.

13. The method according to claim 12, wherein the first electrode includes data electrode and the second electrode includes common electrode.

14. The method according to claim 12, further comprising the steps of:

forming a plurality of thin film transistors adjacent respective cross points of the gate and data bus lines, each of the thin film transistors including a gate electrode, a gate insulator, a semiconductor layer, and source and drain electrodes;

forming a passivation layer on the thin film transistors; and

forming a first alignment layer on the passivation layer.

15. The method according to claim 14, wherein the passivation layer includes one of SiNx and SiOx.

16. The method according to claim 14, wherein the first alignment layer comprises one of polyamide, polyimide, SiO_2, polyvinylalcohol and polyamic acid.

17. The method according to claim 14, wherein the first alignment layer comprises photosensitive materials.

18. The method according to claim 17, wherein the photosensitive material is selected from the group consisting of polyvinylcinnamate, polysiloxanecinnamate and cellulosecinnamate.

19. The method according to claim 14, further comprising the steps of:

forming a black matrix for preventing light from leaking around the thin film transistors, gate bus line, and data bus line;

forming a color filter layer on the second substrate; and

forming a second alignment layer on the color filter layer.

20. The method according to claim 19, wherein the second alignment layer comprises one of polyamide, polyimide, SiO_2, polyvinylalcohol and polyamic acid.

21. The method according to claim 19, wherein the second alignment layer comprises a photosensitive material.

22. The method according to claim 21, wherein the photosensitive material is selected from the group consisting of polyvinylcinnamate, polysiloxanecinnamate and cellulosecinnamate.